CLAIMS

What is claimed is:

1. A method for promoting healing of damaged tissue after an open heart surgery, the method comprising the steps of:

providing a substantially planar healing membrane which is:

(a) substantially-smooth on at least one side;

(b) substantially uniform in composition;

(c) about 10 microns to about 300 microns in thickness;

(d) non-porous;

(e) constructed from a resorbable polymer base material comprising at least one of a poly-lactide polymer and a poly-lactide copolymer; and

(f) adapted to be resorbed into the mammalian body within a period of approximately 18 to 24 months from an initial implantation of the membrane into the mammalian body, and

placing the healing membrane adjacent to an opening in pericardial tissue of a patient so that the pericardial tissue surrounding the opening can regenerate over the membrane.

2. The method of claim 1 wherein the resorbable polymer base material comprises 70:30 poly (L-lactide-co-D,L-lactide).

3. The method of claim 1 wherein the resorbable polymer base material comprises poly-L-lactide.

4. The method of claim 1 wherein the thickness of the membrane is about 100 microns.

5. The method of claim 1 wherein the thickness of the membrane is about 200 microns.

6. The method of claim 1 wherein the healing membrane is provided in a sterile

packaging.

7. The method of claim 1 wherein the step of placing the healing membrane in a patient is effective to attenuate formation of scar tissue.

8. The method of claim 1 wherein the step of placing the healing membrane in a patient is effective to attenuate tissue adhesion.

9. The method of claim 1 further comprising a step of attaching the healing membrane to the pericardial tissue.

10. The method of claim 9 wherein the attaching step comprises heat bonding the membrane to the pericardial tissue.

11. The method of claim 1, wherein the membrane comprises an anti-scar forming agent, including angiotensin antagonists.

12. A method of promoting healing of tissue damaged during open heart surgery, comprising:

providing a resorbable healing membrane which comprises a biodegradable polymer;

placing the resorbable healing membrane in a patient in proximity to the tissue damaged during the open heart surgery so that the tissue heals without substantial scar formation.

13. The method as set forth in claim 12, wherein the resorbable healing membrane comprises 70:30 poly (L-lactide-co-D,L-lactide).

14. The method as set forth in claim 12, wherein the resorbable healing membrane comprises an anti-scar forming agent.

15. The method as set forth in claim 12, wherein the tissue damaged during the open heart surgery comprises pericardiac tissue, and the method further comprises coupling the

pericardiac tissue to the resorbable healing membrane.

16. The method as set forth in claim 15, wherein the pericardiac tissue is directly coupled to the resorbable membrane.

17. The method as set forth in claim 12, further comprising placing a second resorbable membrane in proximity to the tissue damaged during the open heart surgery.

18. The method as set forth in claim 12, further comprising forming the resorbable membrane into a predetermined shape by changing the temperature of the resorbable membrane.

19. The method as set forth in claim 12, wherein the membrane is placed in the patient to form a barrier between the damaged tissue and a heart of the patient.

20. The method as set forth in claim 12, wherein the resorbable membrane is made of a material which is absorbed by the patient within 24 months from when the membrane was placed in the patient.

21. The method of claim 1, wherein the resorbable polymer base material comprises copolymers of polycaprolactone and trimethylene carbonate to thereby reduce a stiffness of the substantially planar healing membrane.

22. The method of claim 1, wherein the healing membrane is precontoured into a heart-shaped bag to surround the apex of a heart.

23. The method of claim 1, wherein the healing membrane is precontoured into a tube to facilitate placing the membrane around the conduit of a left-ventricular assist device (LVAD).

24. The method of claim 1, wherein the healing membrane is precontoured to facilitate placement over a pump of a left-ventricular assist device (LVAD).